



Montana Fish, Wildlife & Parks

Interim Guidelines to Resolve Wolf-Livestock Conflicts and Ensure Human Safety

Introduction

While wolves were federally protected, private citizen and U.S. Fish and Wildlife Service (USFWS) decisions regarding wolf-livestock conflicts were guided by 2 different sets of federal regulations pertaining to the endangered and experimental areas, respectively. Upon successful wolf recovery and delisting, the state plan and laws replaced the federal regulatory structure. While wolves were officially delisted as of March 28, 2008, parties opposed to delisting are expected to challenge the decision in federal court, beginning April 28 and may seek an injunction. If granted, FWP expects an injunction would re-trigger federal law and regulations in Montana.

Until a federal judge rules to the contrary, wolves are federally delisted in Montana. The gray wolf is now legally classified as endangered under state law and will likely be reclassified as a species in need of management in the future. Montana Fish, Wildlife & Parks (FWP) has the authority to manage gray wolves as resident wildlife and as guided by the federally-approved wolf management plan and state law. Montana's wolf conservation and management program is based on the work of a diverse stakeholder group. The plan outlines an adaptive management approach that ensures the long-term success of wolf recovery in a landscape where people live, work, and recreate.

The plan recognizes wolves as a native species and part of Montana's wildlife heritage, allows wolves to find their place on the landscape similar to other wildlife, and addresses and resolves conflicts. The Montana wolf program seeks to decrease the risk of livestock losses and to manage wolves similar to other wildlife species, where biology and social tolerance are balanced using a wide array of lethal and non-lethal management tools when resolving conflicts.

The Montana plan outlines an incremental approach to lethal control, but is less explicit about other important details regarding lethal control. FWP will undertake a formal rule-making process in summer 2008 to adopt more detailed guidelines and criteria for when and how lethal control will be implemented on a consistent, statewide basis. However, in the interim, FWP will use these guidelines statewide to develop a coordinated agency response and guide the activities of private citizens. Interim guidelines are also advisable given the uncertainty of legal challenges to federal delisting in the near term.

The guidelines are based on Montana's federally-approved wolf management plan and final environmental impact statement and Montana Code Annotated (MCA). Furthermore, they are similar to recently expired federal regulations that used to apply in the southern Montana experimental area. The now-expired experimental (10j) regulations allowed lethal control of problem wolves by agencies and private citizens (under a special permit) for up to 45 days, allowed citizens to haze and harass wolves too close to people or livestock, and allowed citizens to kill

wolves seen actively chasing, molesting, or attacking livestock. From 1994 through 2007, federal regulations in the experimental area provided increasing flexibility to agencies and private citizens as the wolf population grew and ultimately surpassed federal recovery goals.

During that time, USFWS also gained much experience in addressing and resolving wolf-livestock conflicts in southern Montana, where the majority of such conflicts occurred historically and still do. Since assuming responsibility for wolf conservation and management, FWP had been implementing the same guidelines and ultimately found them to be similar to the state plan and MCA which apply statewide now that wolves are delisted. The guidelines provide a reasonable, balanced approach to wolf-livestock conflicts and human safety concerns during this interim period. The guidelines should maintain and improve tolerance for non-depredating wolves over the long term.

At the end of 2007, Montana had a minimum of 422 wolves in 73 packs. Thirty nine Montana packs qualified as a breeding pair (BP) according to the federal recovery definition (Sime et al. 2008). These interim guidelines, the state plan, and MCA provide adequate regulation of human-caused mortality to prevent a wolf population decline, are not expected to significantly increase wolf mortality, or jeopardize the recovered status of Montana's wolf population. Penalties for unlawful taking of wolves exist in MCA. FWP does not intend to, nor does FWP expect to see abuses of flexibility now available to private citizens or managing agencies.

In addition to the coordinated agency activities of FWP and USDA Wildlife Services (WS), activities by private citizens will also be addressed through these guidelines. The authority of private citizens to protect their livestock and domestic dogs under MCA 87-3-130 will apply unless there is a federal court-ordered injunction.

Interim Depredation Guidelines

The FWP wolf management plan is based on an adaptive management framework that guides decision-making according to the status of the wolf population. The number of breeding pairs (BP; an adult male and an adult female and at least 2 pups on December 31) in Montana at the end of each calendar year determines whether a more liberal approach or a more conservative approach is taken to address wolf-livestock conflicts during the next calendar year.

In 2006, FWP expanded an existing Memorandum of Understanding with WS to include assistance with investigations of suspected wolf damage. WS is a cooperating federal agency that investigates injured and dead livestock to determine the cause and carries out the field response at the direction of FWP. Both agencies work to help reduce depredation risks and address wolf-related conflicts. The current Memorandum of Understanding outlines roles and authorities and remains in effect, in conjunction with these guidelines.

As outlined in the plan, Montana livestock owners call WS to request an investigation of injured or dead livestock. WS conducts a field investigation to determine if the injury or death was due to natural causes or due to a predator. If it was predator-related, WS examines evidence at the scene to determine if a wolf was responsible.

If WS confirms that the damage was wolf-related, FWP seeks input from both WS and the livestock owner to decide on the best course of action that would be consistent with Montana's approved

plan, state law, and these interim guidelines. Depending on the situation and the decision, WS carries out the response. FWP's role is to assist and resolve the conflict as quickly as possible to prevent further damage. FWP is solely responsible for the decision and ultimately responsible for the status of the state's wolf population.

Conflicts are addressed on a case-by-case basis, striving to connect the agency response to the damage in space and time. This is similar to the approach taken when other wildlife species (e.g. black bears or mountain lions) damage private property in Montana. A problem-solving approach is used, as each situation, pack, livestock operation, and local setting is unique.

As explained in the plan, if the statewide number of BPs exceeds 15, then more aggressive management tools (e.g. lethal removal of problem wolves) can be selected and implemented. If the number of BPs is 15 or less, management decisions become more conservative, with an increasing sensitivity towards preventing the total number of BPs statewide from dropping below the 10 BP minimum.

After BP numbers, the second factor considered is whether the incident took place in remote backcountry areas and areas near national parks or in areas of mixed public/private landownership. In remote backcountry areas where there is lower potential for conflict, management could be more conservative compared to areas where there is a matrix of public and private lands having a greater potential for conflict. In areas of mixed landownership and when the number of BPs is greater than 15, more aggressive management tools may be selected and/or applied more aggressively.

According to the plan and based on previous FWP, WS, and USFWS experience, when making decisions, FWP takes into account more specific factors such as pack size, status and distribution of natural prey, season, where the conflict occurred, the pack's conflict history, age and class of livestock, and the potential for future losses. A spectrum of management responses is considered, including a variety of proactive tools that may help decrease risk for the landowner. For example, FWP may ask WS to attempt to collar and release a wolf after a confirmed or probable depredation event, particularly if the pack suspected of the damage does not have a radio-collared member.

If FWP decides that lethal control is warranted, FWP takes an incremental approach to lethal control, as outlined in the plan, and as implemented by USFWS in the past. More specifically under the Montana plan, lethal removal is considered an option if the number of BPs is greater than 15 statewide, if non-lethal approaches alone are unlikely to be successful, livestock were confirmed killed, the pack is large, and depredations are likely to continue. The goal is to connect the management response, whether non-lethal or lethal, as closely in space and time to where the incident occurred as possible. This also helps FWP and WS direct lethal control at the offending, problem wolves causing the damage.

Lethal control could still be authorized under the plan if the population were below 15 BPs, particularly for chronic conflicts in which wolves are repeatedly killing livestock in a short period of time, frequent losses are occurring on private land, non-lethal approaches have not stopped the depredations, and there is active hunting of adult sized livestock suggesting that wolves are recognizing and actively targeting livestock as a food source. However, once below the 15 BP threshold, there is increasing concern about dropping below the minimum of 10 breeding pairs Montana is required to maintain to get wolves delisted and to keep them off the Endangered Species

List. FWP would place greater emphasis on decreasing risk of loss prior to depredations, recognizing that losses may still occur and wolves may still have to be lethally removed.

According to the plan and in the past under federal regulations, FWP can also issue special permits to private landowners to shoot wolves on sight when WS has confirmed wolf losses, wolves are routinely present on that property or allotment, wolves present a significant ongoing risk to livestock, and FWP has authorized agency lethal control to remove wolves.

Under these guidelines, incremental lethal control activities by agencies or landowners by special permit could proceed for a maximum total of 45 days from the date WS confirmed wolf-caused damage, as was the case under federal regulations. Lethal control activities will conclude when the desired number of wolves is removed or 45 days have expired. WS has been able to accomplish prescribed lethal control in that period of time in previous years. Some exceptions occurred when, for example, a single wolf was thought responsible for livestock damage and moved out of the area or if there were aircraft availability, personnel, or weather constraints. Allowing lethal control by agencies or citizens using special permits to proceed for up to 45 days has provided sufficient time for removal of problem wolves in the past. This means that wolf removal is commensurate with the level of damage wolves are causing, similar to the approach for other wildlife species. Incremental lethal control reduces the size of a pack and its overall protein demands, providing immediate relief when the offending animal/s are removed. It may also provide relief if it becomes more difficult for the remaining wolves to kill livestock, livestock become less vulnerable or are moved out of the area, or when wolves move out of the area.

Previous experience has suggested that killing livestock appears to be a learned behavior for wolves, perhaps in the same way that bears learn about human-related food sources and re-visit them. Incremental lethal wolf control can result in elimination of an entire pack if wolves are keying into livestock as a food source repeatedly, despite the combination of non-lethal approaches and incremental removal. But given the seasonality of livestock grazing on public land allotments in Montana and husbandry models in which the most vulnerable animals are on private lands, incremental removal of problem wolves has helped keep damage less than predicted and facilitated wolf recovery under USFWS leadership.

Non-lethal control by FWP, WS or landowners could either be opportunistic or intentional according to the plan and MCA, and also allowed under previous federal regulations. The intent is that non-lethal efforts to opportunistically haze / harass wolves would discourage investigation or testing of livestock. Intentional hazing/harassing using less-than-lethal munitions (rubber bullets, bean bags, or cracker shells shot from a 12-gauge shot gun) may also accomplish the same goal, particularly if wolf activity is persistent or in very close proximity to livestock. Furthermore, proactive non-lethal deterrents or certain husbandry practices (e.g. electric fencing, increased human presence, fladry, guard dogs, night pens, shed-lambing, etc.) can decrease risk of wolf predation as well. Livestock owners, FWP, WS, USDA Natural Resources and Conservation Service, watershed groups and/or non-governmental organizations in Montana have worked together to implement proactive deterrents where practical and cost effective. An additional resource available to Montana livestock owners is the Montana Livestock Loss Reduction and Mitigation Program that will reimburse livestock owners for verified wolf losses and provide funding through a grants program to help offset costs of proactive deterrents.

Previous experience and data showed that most wolves and most packs did not attack livestock, especially adult horses and cattle, but wolf presence around livestock does result in some level of

depredation (Bangs et al. 2005, Sime et al. 2007). FWP and WS have found that Montana landowners vary in their preferences and desires about how wolf-livestock conflicts are addressed. Some prefer very aggressive lethal approaches and some do not want any lethal control. Still others fall somewhere in between. Because most confirmed incidents of injured or dead livestock in Montana involve livestock producers who were affected 2 or more times and that most incidents occurred on private lands, a combination of proactive non-lethal deterrents combined with strategic incremental lethal control of problem wolves has been and will continue to be the best way to resolve wolf-livestock conflicts.

Human Safety

To ensure human safety, FWP or WS will take action when the continued presence of a wolf or wolf-like canid poses a potential threat to human safety, consistent with existing guidelines established for nuisance black bears or mountain lions and previous federal regulations. While the risk of an aggressive encounter with a wild wolf is low, FWP believes the risk goes up in the absence of proper management. FWP has and will continue to provide outreach materials about wolves and wolf behavior to inform the public. FWP will work to discourage habituation, artificial feeding or creation of artificial / intentional food sources by people, or increasing bold behavior by wolves.

When wolves or wolf-like canids loiter near people or areas of human activity, FWP will evaluate the potential risk to human safety, taking into account the setting, behavior of the animal, and the sequence of events. Although the management responsibility related to wildlife and human safety rests with FWP, local law enforcement or other state / federal agency personnel may also respond. FWP will work aggressively to haze and harass the wolf or wolf-like canid. However, FWP may also lethally remove bold, food conditioned, or habituated wolves or wolf-like canids if the animal poses an immediate or ongoing threat to human safety. FWP may also remove sick, injured, or diseased wolves or wolf-like canids.

In the unlikely need to defend human life during an aggressive wolf encounter, citizens may use any means, including lethal force, to address an imminent threat. MCA (87-3-130) allows a person to kill a wolf if the wolf is attacking, killing, or threatening to kill a person or livestock when there is an immediate and direct threat. Citizens must notify FWP within 72 hours. This is consistent with FWP Guidelines and state law for mountain lions and black bears. It was also the case under federal regulations when wolves were protected by the Endangered Species Act.

s/

M. Jeff Hagener / date
Director
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s/

Steve Doherty / date
Chairman
Montana Fish, Wildlife & Parks Commission

Definitions

(taken from the Montana Gray Wolf Conservation and Management Plan Final Environmental Impact Statement and the now-expired 10j federal regulations for the southern Montana experimental area)

adaptive management: a model for wolf conservation and management in which the number of wolf packs determines the appropriate management strategies; changes in the number of packs determined through a monitoring program directs selection of more conservative or liberal management strategies; model incorporates resource objectives, monitoring protocols, evaluation of predicted outcomes, and a decision process

chronic: packs depredate more frequently, demonstrating an escalating behavior pattern of actively hunting livestock; killing livestock repeatedly and within short periods of time, particularly adult-sized livestock; recognizing or targeting livestock as a food source

confirmed depredation: incident where Wildlife Services conducts a field investigation of dead or injured livestock, at the request of the producer; depredation is *confirmed* in cases where there is reasonable physical evidence that an animal was actually attacked and/or killed by a wolf. The primary confirmation would ordinarily be the presence of bite marks and associated subcutaneous hemorrhaging and tissue damage, indicating that the attack occurred while the victim was alive, as opposed to simply feeding on an already dead animal. Spacing between canine tooth punctures, feeding pattern on the carcass, fresh tracks, scat, hairs rubbed off on fences or brush, and/or eye witness accounts of the attack may help identify the specific species or individual responsible for the depredation. Predation might also be confirmed in the absence of bite marks and associated hemorrhaging (i.e. if much of the carcass has already been consumed by the predator or scavengers) **if** there is other physical evidence to confirm predation on the live animal. This might include blood spilled or sprayed at a nearby attack site or other evidence of an attack or struggle. There may also be nearby remains of other victims for which there is still sufficient evidence to confirm predation, allowing reasonable inference of confirmed predation on the animal that has been largely consumed

defense of life/property: release from criminal liability for killing or injuring a wolf if the wolf is attacking, killing, or threatening to kill a person, livestock; or if the wolf is attacking or killing a domestic dog (MCA 87-3-130)

depredation: incident where livestock or guarding animals are injured or killed

guarding animals: domestic animals (dogs, llamas etc.) that escort livestock to decrease likelihood of a depredation incident by aggressively defending livestock in the presence of wolves or other predators; may also be herding breeds

habituation: readily visible in close proximity to people or structures on a regular basis; not threatened by close proximity and may even be attracted to human presence or human food sources; extremely rare behavior in wild wolves, but typical behavior for released captive wolf or wolf-dog hybrid; for wolves, may or may not involve food conditioning

in the act of attacking or killing: the actual biting, wounding, grasping, or killing of livestock or domestic dogs

in the act of threatening to kill: the actual chasing, testing, molesting, harassing of livestock or livestock herding / guarding animals that would indicate to a reasonable person that an attack was imminent

landowner: private landowner or public land permittees who actually experience confirmed depredation

lethal control: management actions that result in the death of a wolf

livestock: cattle, calf, hog, pig, horse, mule, sheep, lamb, goat, herding/guarding animals, rhea, emu, ostrich

management setting: the combination of landownership patterns, land use, social factors, biological constraints, and physical attributes of the environment that describe a particular area or management situation

mixed landownership: patterns of land ownership where privately owned lands are intermingled with public lands and/or corporate-owned lands; sometimes called a “checkerboard pattern”

non-lethal control: a variety of management activities intended to avert or resolve a conflict situation without killing the wolf or wolves in question; examples include non lethal harassment to disrupt or interrupt wolf behaviors, frightening a wolf, monitoring of wolf location using radio telemetry, or relocation

non-lethal harassment: an example of non-lethal control where a wolf is frightened or threatened, but is not mortally wounded or killed; purpose is to discourage wolf activity near people or livestock; examples yelling, radio-activated noise-makers, or firearms which discharge cracker shells

proactive deterrents: tools or husbandry practices that may decrease risk of wolf-caused losses; examples include electric fencing, increased human presence, fladry, guard dogs, night pens, shed-lambing, etc.

probable depredation: incident where Wildlife Services conducts a field investigation of dead or injured livestock, at the request of the producer; having some evidence to suggest possible predation, but lacking sufficient evidence to **clearly** confirm predation by a particular species, a kill may be classified as *probable* depending on a number of other factors such as (1) has there been any recently confirmed predation by the suspected depredating species in the same or nearby area? (2) How recently had the livestock owner or his employees observed the livestock? (3) Is there evidence (telemetry monitoring data, sightings, howling, fresh tracks etc.) to suggest that the suspected depredating species may have been in the area when the depredation occurred? All of these factors, and possibly others, should be considered in the investigator’s best professional judgment.

problem wolf: wolves that have been confirmed by FWP or WS to have attacked or been in the act of attacking livestock or herding / guarding dogs within the last 45 days; or a nuisance animal that is loitering near human dwellings, habituated, acting abnormally, or that could potentially compromise human safety; not artificially fed, attracted, or baited

public safety problem or threat: any situation where the continued presence of a carnivore poses a threat to human safety; or, an attack has resulted in the loss of livestock or personal pets; or a human has been physically injured or killed

special kill permit: written authorization granted to a landowner by Montana Fish, Wildlife & Parks to kill or destroy a specified number of animals causing damage to private property; permits are only valid under a specific set of conditions or criteria and are issued as a part of a coordinated agency response to confirmed depredation

take: to harass, hunt, capture, or kill or attempt to harass, hunt, capture, or kill wildlife

unconfirmed: incident where Wildlife Services conducts a field investigation of dead or injured livestock, at the request of the producer; lacking sufficient evidence to classify an incident as depredation in contrast to other possible causes of death, it is classified as *unconfirmed*; it is unclear what the cause of death may have been. The investigator may or may not have much of a carcass remaining for inspection, or the carcass may have deteriorated so as to be of no use; in the context of wolf management, cause of death is attributed to a cause other than wolf predation

undocumented loss: livestock losses for which there is no apparent explanation for the loss; usually in the context of a numerical discrepancy between the number of livestock head at the beginning of the grazing season and what is retrieved at the end of the grazing season; evidence documenting a death is usually not found

wolf-human conflict: where a public safety problem develops; a situation where an FWP employee reasonably determines that the continued presence poses a threat to human safety, an attack has resulted in the loss of livestock or personal pets, or that a human has been physically injured or killed.

wolf-livestock conflict: where a wolf or wolves are loitering, testing, worrying, or otherwise disrupting livestock; also, a situation where a wolf is suspected to have killed or injured livestock or guarding animals

References

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Addendum

Table: FWP Interim Wolf Guidelines for Coordinated Agency Response and Activities by Private Citizens to Address Wolf-Livestock Conflicts and Ensure Human Safety
(Table FWP Interim Wolf Guidelines.doc)

Attachments (2)

Bangs et al. 2006 (VPC 2006 Final Bangs.pdf)

Sime et al. 2007 (Sime et al MASTER WDM 2007 final ss version.pdf)